



# Animal Health Diagnostic Center



## Intersection with the VetLRN

*Bruce L. Akey MS DVM  
Executive Director*



# ISO 17025

# GLP

The AHDC operates under a variety of national and international accreditation or certification standards and programs



## National Animal Health Laboratory Network



# Animal Health Diagnostic Center

- The AHDC has Cooperative Agreements with:
  - NYS Department of Agriculture and Markets
  - NYS Department of Environmental Conservation for CWD and AI testing
  - NYS Department of Health for vector-borne diseases – West Nile Virus
  - USDA:VS – Program Disease Surveillance
  - USDA:NIFA – NAHLN testing for FADs

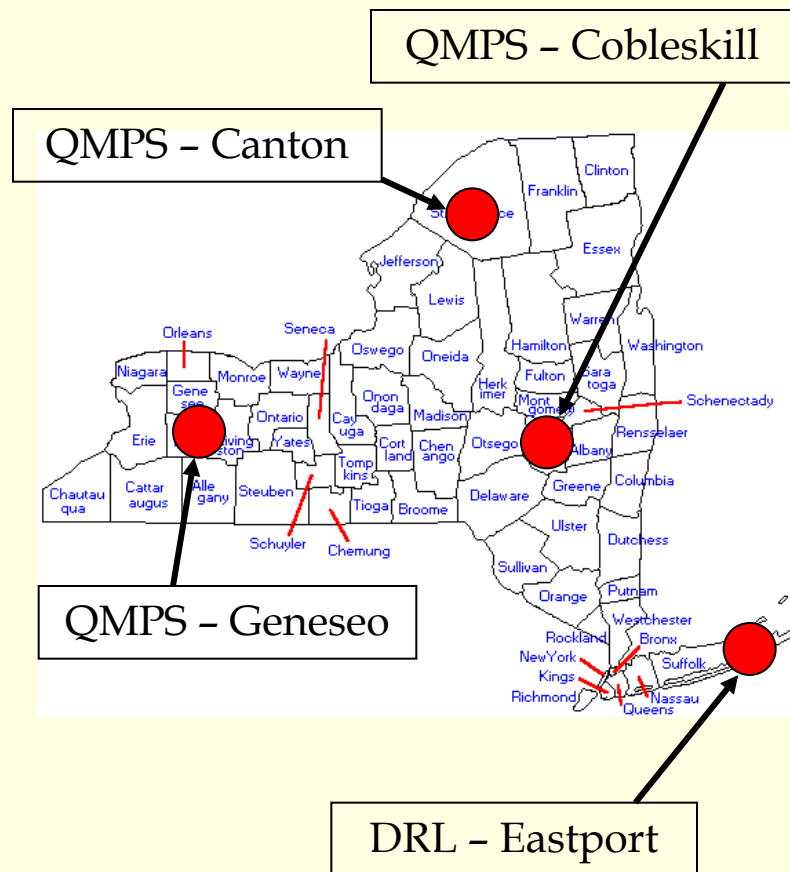


# Animal Health Diagnostic Center

- Number of Faculty & Staff: ~220
- Activities:
  - Service
    - Testing
    - Outreach
  - Research
  - Teaching
- Four laboratories elsewhere in New York State



# AHDC – Location of Facilities



# AHDC Service Categories

- Infectious Diseases
- Non-Infectious Diseases
- Analytical Services
- Field Veterinary Support Programs
- Operational Support



# Infectious Disease Services

- Virology
- Bacteriology / Mycology
- Serology / Immunology
- Molecular Diagnostics
- Avian Disease Program
- Parasitology
- Anatomic Pathology
- Wildlife Oral Rabies Vaccination Project

**Mad Cow**

**Bird Flu**



# Non-Infectious Disease Services

- Clinical Pathology
- Comparative Coagulation
- Endocrinology
- Toxicology

**MELAMINE**





# Field Veterinary Support

- Quality Milk Production Services
- Support for the NYS Cattle Health Assurance Program (NYSCHAP)
- Field Disease Investigation Unit
- Veterinary Support Services Program
- Duck Research Lab



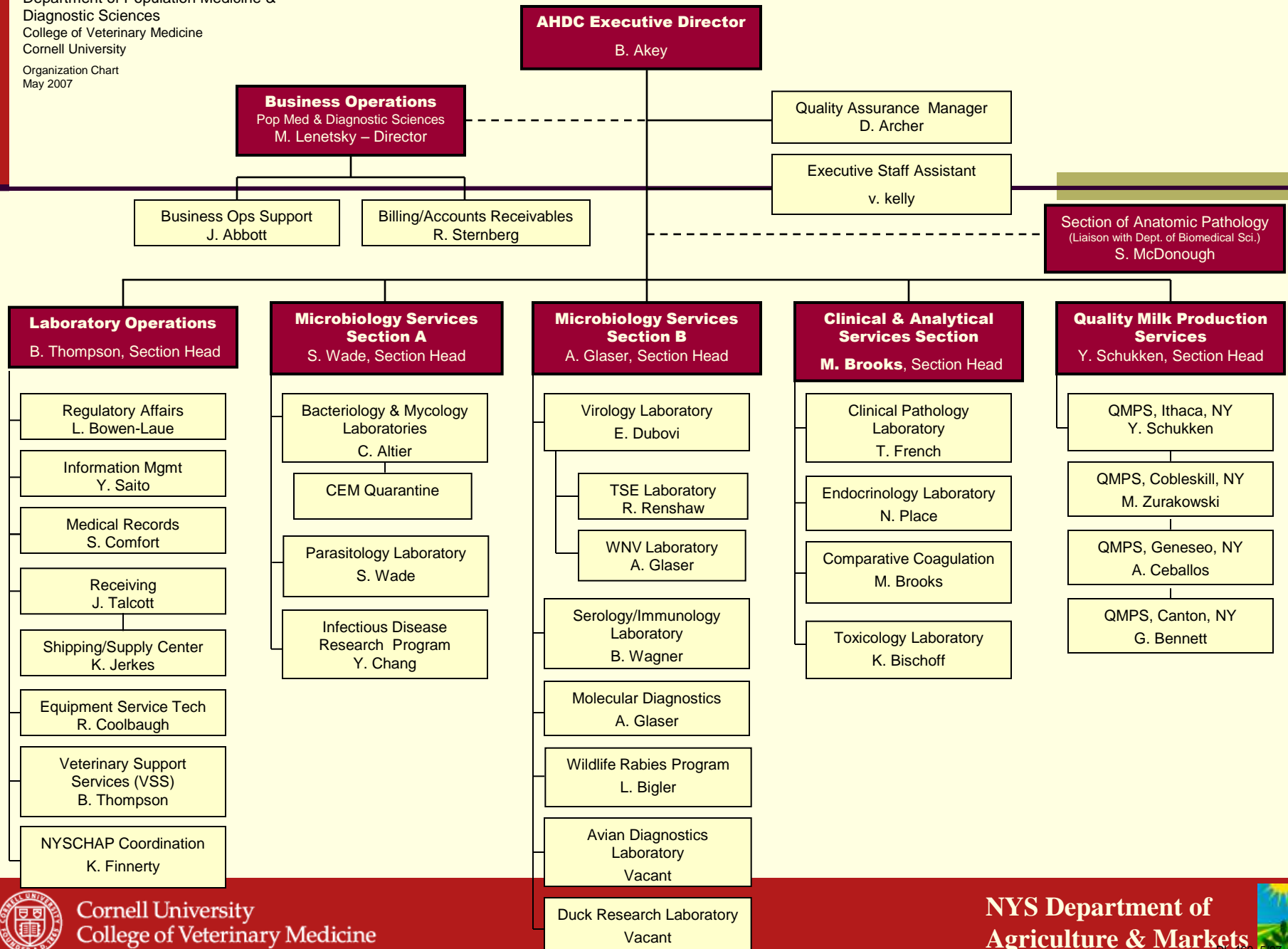
# Operational Support Programs

- Budget & Financial Services
- Information Technologies & Communications
- Quality Assurance Program
- Sample Receiving & Processing
- Referral Services
- Shipping Services
- Regulatory Coordination
- Diagnostic Supply Center



# Animal Health Diagnostic Center

Department of Population Medicine &  
Diagnostic Sciences  
College of Veterinary Medicine  
Cornell University  
Organization Chart  
May 2007



Cornell University  
College of Veterinary Medicine

NYS Department of  
Agriculture & Markets



DL-480 5/07

# Federal Testing Programs under the National Animal Health Laboratory Network

- Avian Influenza/Swine Influenza
- Exotic Newcastle Disease
- Classical Swine Fever
- Foot-and-Mouth Disease
- Bovine Spongiform Encephalopathy
- Chronic Wasting Disease
- Scrapie

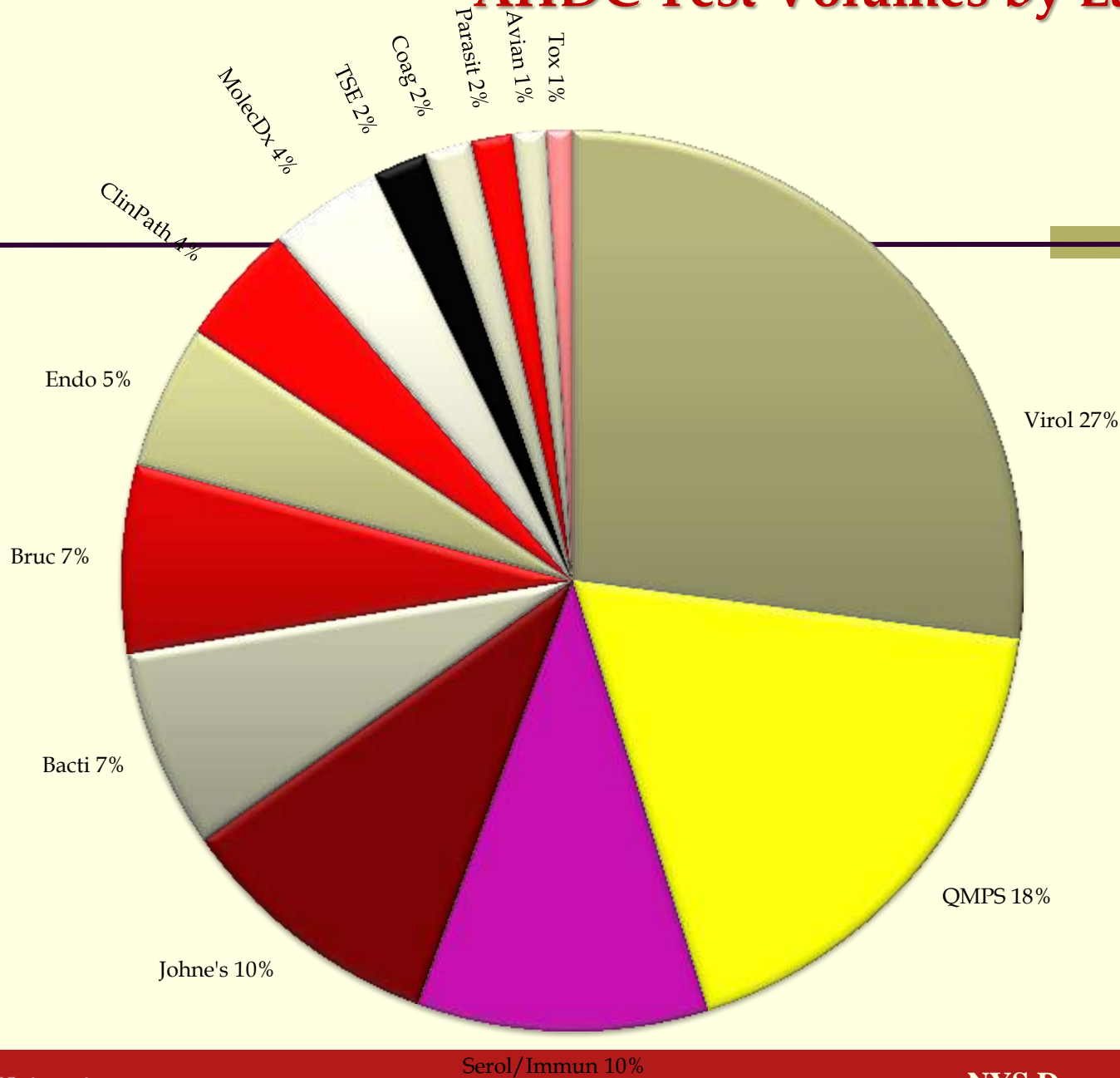


# AHDC Activities

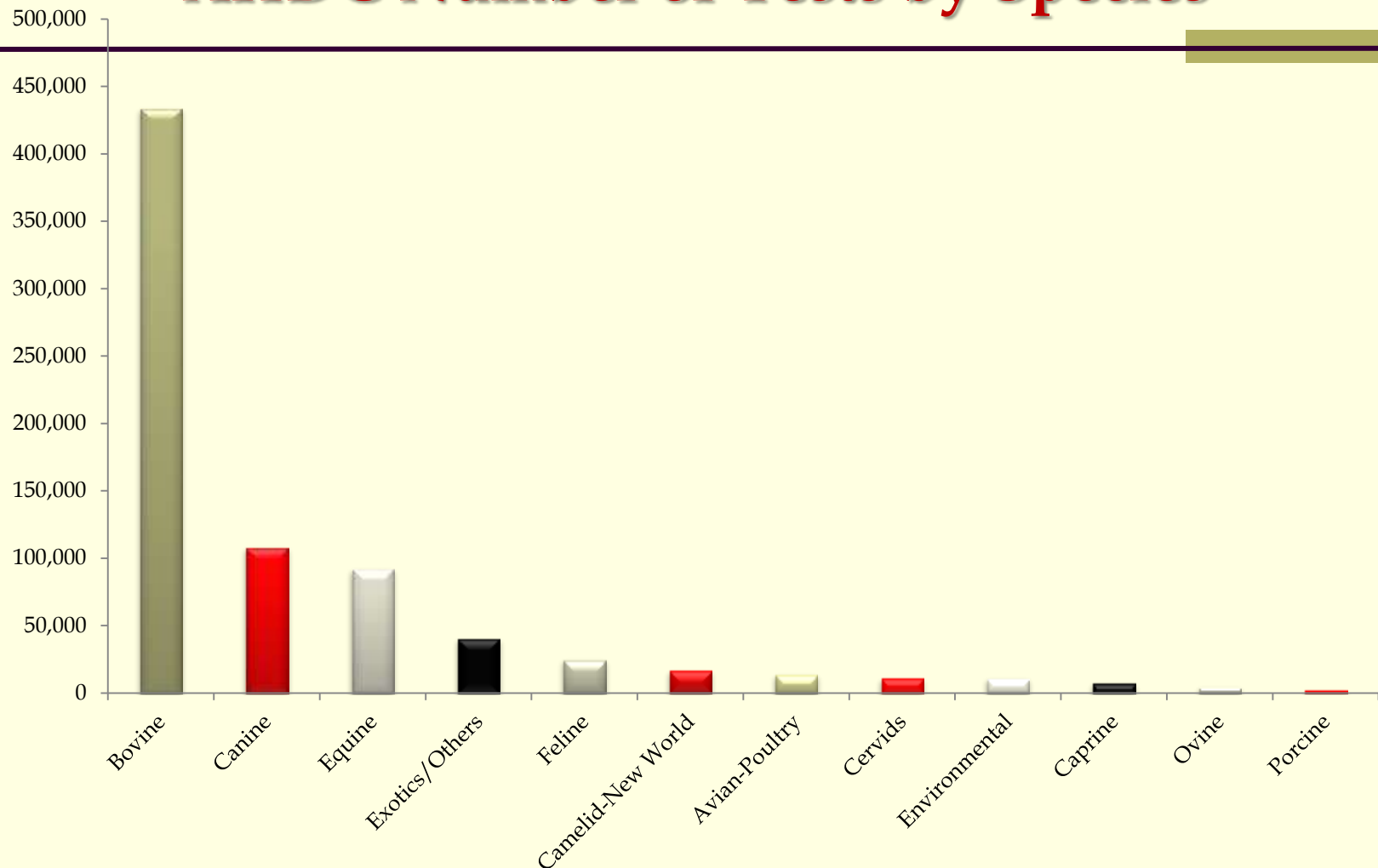
- Approximately 155,000 cases annually
  - Over 300,000 samples
  - Over 1,500,000 tests
- Highlights:
  - Diagnosed first case of CWD in NYS
  - Diagnosed first-ever case of canine flu
  - Discovered new canine pneumovirus
  - Avian flu surveillance testing in LBM in NYC and in wildlife
  - Melamine and Aflatoxin in pet feeds



# AHDC Test Volumes by Lab Section



# AHDC Number of Tests by Species



















## Biosafety Level 3

- Necropsy
- Bacti/Mycology
- Virology
- Research







# Animal Health Diagnostic Center

[My Account](#)

[Tests & Submissions](#)

[Results](#)

[Lab Sections](#)

[Technical Resources](#)

[Research](#)

[People](#)

[About](#)

## Bacteriology

[Bacteriology Testing](#)

[Test Info & Protocols](#)

[Test Schedules](#)

[Research/Development](#)

[About the Bacteriology Section](#)

[Personnel](#)

[Contact Bacteriology](#)



All Species ▾

All Lab Sections ▾

All Test Types ▾

Enter Keywords

Test Search

[CVM Home](#) > [AHDC](#) > [Sects](#) > [Bact](#)

**The Bacteriology Section** of the Animal Health Diagnostic Center provides high quality, detailed, and complete diagnostic bacteriology testing service to veterinary clients, round the clock coverage for the Veterinary Medical Teaching Hospital, and contributes to the education of the veterinary students.

**[Dr. Craig Altier](#)** (Director)

**[Dr. Yung-Fu Chang](#)** (Director of the Infectious Diseases Research Lab)

**[Dr. Patrick McDonough](#)** (Clinical Bacteriologist)

**Rebecca Franklin** (Laboratory Manager)

Dept of Population Medicine &  
Diagnostic Science



# Bacteriology/Mycology Services

- \* Aerobic and anaerobic culture for the presence of bacterial pathogens
- \* Mycoplasma
- \* Culture for fungal pathogens
- \* Ureaplasma
- \* Tritrichomonas foetus
- \* Mycobacterium



# Bacteriology / Mycology Services

- \*Comprehensive testing for the diagnosis of Salmonella, Heliobacter, and Clostridial diseases
- \*Full service reproductive microbiology testing and consultation for bovine, equine, and canine infertility
- \* Prebreeding and abortion work-ups including herd health testing for AI centers

(The National Association of Animal Breeders has designated the Bacteriology Section as the reference laboratory for semen microbiology.)



# Bacteriology/Mycology Services

- \*Serologic assays for antibodies against *Leptospira*, canine and bovine *Brucella*, and the systemic fung (designated by the AAVLD as the reference laboratory for canine brucellosis testing)
- \* Identification and susceptibility testing for aerobic and fungal pathogens
- \*PCR/Sequencing for identification of pathogens
- \* Regulatory testing for the importation and exportation of animals and animal products







# NYS Veterinary Diagnostic Laboratory

[My Account](#)

[Tests & Submissions](#)

[Results](#)

[Lab Sections](#)

[Technical Resources](#)

[Research](#)

[People](#)

[About](#)

## Toxicology

[Toxicology Testing](#)

[Test Info & Protocols](#)

[Test Schedules](#)

[Research/Development](#)

[About the Toxicology Section](#)

[Personnel](#)

[Contact Toxicology](#)



All Species ▾

All Lab Sections ▾

All Test Types ▾

Enter Keywords

Test Search

[CVM Home](#) > [AHDC](#) > [Sects](#) > [Toxic](#)

**The Toxicology Section** of the Animal Health Diagnostic Center strives to be the most competent and responsive toxicology laboratory in the country by providing complete analytical toxicology services to private practitioners, commercial agricultural businesses, cooperative extension agencies and universities. The Toxicology Section utilizes modern state-of-the-art analytical instruments and techniques for the detection, identification, and quantification of organic, inorganic and toxic compounds of interest to the food, feed, and animal industries.

Dept of Population Medicine &  
Diagnostic Science

College of Veterinary Medicine

**[Dr. Karyn Bischoff](#)** (Toxicology Director)

**[Dr. Motoko Mukai](#)** (Senior Research Associate)

**[Joe Ebel](#)** (Laboratory Manager)



# Toxicology Services

- Equine pre-purchase drug screening and horse pull drug screening.
- Organic: Identification and confirmation by HPLC, Capillary GC/MS and LC/MS/MS, TLC:

Drugs	Pesticides, insecticides, fungicides	
Rodenticides	Alkaloids	Mycotoxins
Ionophores	Vitamin A&E	Unknowns



# Toxicology Services

- Inorganic analysis: By XRF, GFAA and ICP

Toxic heavy metals

Mineral panels

Whole blood lead, selenium, and arsenic

Serum copper and zinc levels





# Animal Health Diagnostic Center

[My Account](#) [Tests & Submissions](#) [Results](#) [Lab Sections](#) [Technical Resources](#) [Research](#) [People](#) [About](#)

## Client Home Page

\*Start Date:

\*End Date:

Species:

Animal ID:

Owner ID:

Owner Last Name:

Owner Business Name:

Reference No:

\* = required fields

**Note:** Online results are continuously updated and are available as they are finalized. The date range can be adjusted by changing the start and end dates. This will reduce the amount of time needed to load the webpage.

While efforts have been taken to ensure the accuracy of the information, errors or omissions are possible. Please contact the lab at [AHDC\\_Client\\_Access@cornell.edu](mailto:AHDC_Client_Access@cornell.edu) if you think a test result is questionable or you are having difficulties accessing your testing information. If you have any other questions or comments regarding online results, please don't hesitate to contact us. Any feedback you have regarding the use of this site is greatly appreciated.

## HL7 Messaging

### Cornell University

©2010 Cornell University College of Veterinary Medicine  
Ithaca, New York 14853-6401

Last Update July 1, 2010



The AHDC includes the New York State Veterinary Diagnostic Laboratory, a collaborative effort with the NY State Department of Agriculture and Markets



NY State Cattle Health Assurance Program



# Veterinary Support Services

- Dr. Belinda Thompson – bovine, equine, camellid, small ruminants
- Dr. Paul Virkler – bovine (dairy), camellid, small ruminants
- Dr. Linda Mittel – equine, companion animal
- Dr. Beth Bunting – wildlife, exotics

